

V. WETLAND COMPONENT

A. Introduction

Maine has an abundance and diversity of wetlands unequalled in the Northeastern U.S. One quarter of the state's land area is wetlands, four times the wetland area of the other five New England States combined. Over five million acres of Maine's wetlands are freshwater types (wooded swamps, shrub swamps, bogs, freshwater meadows, freshwater marshes and floodplains), while only 157,500 acres are tidal types (tidal flats, salt marsh, brackish marsh, aquatic beds, beach bars and reefs). Between 1780 and 1980, an estimated 20% of Maine's wetlands were lost. Human endeavors like building and road development, dam and impoundment building, agriculture and timber harvesting, and other activities are prime contributors to these wetland losses.

Wetlands are valuable not only for their beauty and the recreation opportunities they support, but also for critically important functions they perform in our environment, including water storage, flood conveyance, groundwater recharge and discharge, shoreline erosion control and water quality improvement. They are the source of timber resources highly valuable to Maine's forest products industry, and perhaps most important, wetlands provide habitat vital to fish and wildlife, including many rare and endangered species.

The identification of important wetlands and their protection by regulation and acquisition has been ongoing for many years by government and private organizations. Since passage of the Emergency Wetlands Resources Act of 1986, State Comprehensive Outdoor Recreation Plans (SCORPs) have been required to address the acquisition of wetlands with stateside Land and Water Conservation Fund (LWCF) dollars. Specifically, federal SCORP guidelines require the inclusion of a wetlands priority component consistent with Section 303 of the Emergency Wetlands Resources Act of 1986. At a minimum this component must:

- *be consistent with the National Wetlands Priority Conservation Plan (NWPCP) prepared by the US Fish and Wildlife Service;*
- *provide evidence of consultation with the state agency responsible for fish and wildlife resources; and*
- *contain a listing of those wetland types that should receive priority for acquisition.*

B. National Wetlands Priority Conservation Plan

The Emergency Wetlands Resources Act of 1986 affirmed that both federal-side and stateside LWCF money could be used to acquire wetlands. It required the Secretary of the Interior to prepare a National Wetlands Priority Conservation Plan that would specify the types of wetlands and interests in wetlands that should be given priority for acquisition with LWCF dollars so that efforts would focus on the country's more important, scarce, and vulnerable wetlands. Federal agency wetland acquisitions with LWCF dollars (primarily by the US Fish and Wildlife Service) must be consistent with the plan, and wetland acquisitions by states with stateside LWCF dollars must be consistent with a SCORP that is consistent with the plan.

The NWPCP was prepared by the US Fish and Wildlife Service and published in 1989. To be eligible for purchase with LWCF dollars, a wetland must meet the following minimum criteria specified in the plan:

1. The wetland site must include predominantly (50% or more) wetland types that are rare or declining in an ecoregion.
2. The wetland must be threatened with loss or degradation. A site would be considered threatened if more than 10% of its values and functions are likely to be destroyed or adversely affected by direct, indirect, or cumulative impacts over the next 10 years considering the array of possible threats to the site and the level of threat afforded by existing regulations and owners' intentions. Obvious threats include draining and filling, building development, mining, transportation projects, vegetation removal, etc.
3. The wetland site must offer documented public values in at least two of the following areas: wildlife, commercial and sport fisheries, surface and groundwater quality and quantity and flood control, outdoor recreation, and other values, such as rare/unusual species or features, educational/research value, or historical/archaeological features.

To determine whether these minimum criteria are met, standards (Wetlands Assessment Threshold Criteria) are given in the plan to provide a consistent method of evaluation.

States developing SCORP wetland components must ensure that all three of the minimum criteria are addressed in their LWCF acquisition planning process and documents, and that sufficient information will be available to determine that wetland acquisitions with LWCF dollars meet these criteria.

C. *Regional Wetlands Concept Plan*

To assist implementation of the Emergency Wetlands Resources Act and the National Wetlands Priority Conservation Plan, regional offices of the US Fish and Wildlife Service prepared “regional wetland concept plans” that address wetland types, losses, threats, and values specific to different parts of the US and identify wetlands in each state that should be given priority consideration for acquisition with LWCF dollars. These lists are offered as foundations for states to build upon. The Regional Wetlands Concept Plan, Emergency Wetlands Resources Act, Northeast Region was published in 1990 and identifies over 70 wetlands or wetland complexes in Maine covering about 115,000 acres that meet the minimum criteria and are considered priorities for acquisition with federal-side or state-side LWCF dollars (Table30). The regional plan also identifies wetlands that are priorities under other programs such as the North American Waterfowl Management Plan (Table31). The regional plan was prepared in consultation with state agencies and reflects input from the Maine Wetlands Conservation Priority Plan: An Addendum to the State Comprehensive Outdoor Recreation Plan, (1988).

D. *Wetland Priority Components in Maine SCORPs*

Maine’s LWCF project selection process for stateside LWCF grants requires wetland acquisition projects to meet the criteria specified in SCORP (Appendix VI). The 1988 and 1993 Maine SCORPs included the required wetland priority components.

The Maine Wetlands Conservation Priority Plan: An Addendum to the State Comprehensive Outdoor Recreation Plan (1988) was a joint effort of the Maine Bureau of Parks and Recreation, the Maine State Planning Office, and the Wetlands Subcommittee of the Land and Water Resources Council, which coordinates natural resources policy among state agencies. The Addendum affirmed the three primary criteria of the national plan and identified the following Maine LWCF wetland acquisition priorities based on these:

1. rare or declining wetland types:
 - palustrine emergent (fresh marshes)
 - estuarine intertidal (coastal marshes and mudflats)
 - some palustrine forested (wooded swamps) in York County and southern coastal areas

2. wetlands threatened with loss or degradation:

- coastal marshes in southern and mid-coast areas where population increases and second home construction is placing pressure on these areas
- large peatlands, if peat mining becomes prevalent in Maine;
- coastal intertidal areas in regions of high population growth;
- critical edge habitat in coastal and other wetlands; and

3. high value and/or function wetlands, determined by on-site analysis.

Under this criterion, the Addendum recommended particular attention to the following in Maine:

- high value and multi-value wetlands;
- habitats for rare and endangered plant and/or animal species;
- habitat types that are rare or threatened in the state and for which there are inadequate representatives under protected status;
- exemplary occurrences of common wetland types that are not receiving adequate protection;
- habitats of state significance for fishery and wildlife resources, and that may satisfy the goals and guidelines of international treaties such as the North American Migratory Waterfowl Plan;
- wetlands with important hydrological functions of state or regional significance; and
- culturally significant wetlands, such as those with recreational or educational potential and those that can accommodate high visitor use.

In addition to acquisition priorities, the Addendum to the 1988 SCORP recommended that the Wetlands Subcommittee of Land and Water Resources Council make a number of improvements to wetland information, mapping, monitoring, regulation, and enforcement.

The 1993 Maine SCORP recommended additional wetland acquisition criteria for stateside LWCF dollars that would target important wetlands not emphasized by other protection programs. These additional criteria required that a wetland proposed for acquisition:

- offer public access, including access to associated surface water;
- be located near population centers or in areas with high rates of growth;
- be wetland types that are not priorities for protection through other programs;
- contain public values and benefits that cannot be maintained except through acquisition, especially to gain access;
- be wetlands of local importance because they have been identified as a protection priority in local comprehensive, open space, or recreation plans; or because they provide public access to locally important outdoor recreation opportunities; or are key in protecting locally important habitat; and
- provide opportunities for nature education for a variety of age groups.

The 1993 SCORP also recommended that

- the Maine State Planning Office (SPO) develop a State Wetlands Conservation Plan that identifies wetland conservation priorities; directs the coordination of state programs toward the priorities; guides the expenditure of state resources on wetland acquisition and mitigation; addresses the relationship between regulatory and acquisition programs; and provides guidelines for identifying locally important wetlands; and
- the Department of Economic and Community Development develop information to guide towns in assessing wetland functions and values by watershed as part of local comprehensive planning efforts, and encourage towns to identify protection measures for locally important wetlands. (Local comprehensive planning assistance is now provided by SPO.)

E. Maine Wetlands Conservation Plan

In 1994, the Maine State Planning Office (SPO) received a wetland planning grant from the US Environmental Protection Agency to prepare a state wetland conservation plan in cooperation with the Maine Department of Environmental Protection (DEP) that would explore wetland regulation issues of concern at the time and consider broader wetland policy and program opportunities, including acquisition. Work groups including conservation and development interests and state and federal agencies involved in wetland regulation and protection convened around four broad topics: regulation, acquisition, inventory, and mitigation (compensation). The acquisition work group shifted its focus from acquisition to a broader consideration of how wetland functions and values should be assessed and prioritized. The resultant Maine State Wetland Conservation Plan, published in 2001, provides goals and recommendations to achieve wetland conservation, which must be reviewed annually by a Wetlands Interagency Team (WIT) working with federal partners.

Preparation of the Maine State Wetlands Conservation Plan yielded a number of important achievements, including:

- expanded regulatory protection under the Natural Resources Protection Act for all freshwater wetlands regardless of size;
- annual reporting of wetland impacts from DEP-permitted projects by wetland type and by town;
- improvement of information about Maine wetlands, including statewide digitizing of the National Wetlands Inventory ;
- a wetland characterization method that allows the identification wetlands likely to be significant in a watershed in the functions and values of flood flow alteration, sediment retention, plant and animal habitat, finfish and shellfish habitat, and education and research;
- fostering a habitat-based approach to the conservation of open space; and

- formalization of a State Wetland Interagency Team (WIT) to coordinate state wetland policies and programs.

Overall, the *Maine State Wetlands Conservation Plan* focuses on improving the identification of wetlands that should be the focus of protection efforts. It recommends evaluating critical wetland functions and values in a watershed context and indicates adding to any list of protection priorities those wetlands that are found to be important as a result of such characterizations.

The plan recommendation that focuses most directly on wetland acquisition appears under Goal 1, “Provide full protection for Maine’s priority wetland systems:”

Recommendation F: Create and maintain partnerships and mechanisms to restore or acquire priority wetlands and adjacent uplands.

Actions:

- Continue efforts of state agencies to identify state and federal wetland habitat priorities.
- Continue to seek funding for state and federal wetland habitat priorities, building upon existing successful partnerships between the state and federal agencies, local governments and private conservation organizations.
- Explore currently untapped options for acquisition and restoration of wetlands.
- Summarize existing acquisition and restoration efforts in the state for L&WRC.
- Host conference on wetland acquisition/ restoration opportunities in Maine targeted at potential local partners.

F. Beginning with Habitat

In a related effort, *Beginning with Habitat* is a habitat-based landscape approach to assessing wildlife and plant conservation needs and opportunities. The goal of the program is to maintain sufficient habitat to support all native plant and animal species currently breeding in Maine by providing each Maine town with a collection of maps and accompanying information depicting and describing various habitats of statewide and national significance found in the town. The program is a cooperative effort of the Maine Department of Inland Fisheries and Wildlife, Maine Department of Conservation Natural Areas Program, Maine Audubon Society, Maine State Planning Office, United States Fish and Wildlife Service, Maine Cooperative Fish and Wildlife Research Unit, Southern Maine Regional Planning Commission, and Wells National Estuarine Research Reserve.

After reviewing high value plant and animal habitats – of which wetlands are key components - and undeveloped habitat blocks, biologists from the Maine Department of Conservation Natural Areas Program and Department of Inland Fisheries and Wildlife identified landscape-scale areas meriting special conservation attention - including acquisition. These Focus Areas are built around the locations of rare plants, animals, and natural communities, high quality common natural communities, significant wildlife habitats, and their

intersection with large blocks of undeveloped habitat, and are designed to bring attention to areas with concentrations plant and animal habitats values. The important habitat resources identified in a community are recommended as a foundation for resource protection and open space planning that may be part of town comprehensive planning and local land trust conservation efforts.

At this writing, *Beginning with Habitat* Focus Areas for Conservation, including important wetlands, have been identified in Androscoggin, Cumberland, Franklin, Kennebec, Knox, Lincoln, Oxford, Penobscot, Somerset, Waldo, and York counties (Table 32).

G. Current Wetland Acquisition in Maine

Current wetland acquisition in Maine is driven largely by the program objectives of agencies and organizations concerned with fish, wildlife, and plant habitats rather than by a single overarching wetland protection strategy, and wetlands high in habitat values account for much of the wetland acreage that has been acquired for protection in Maine. The principal funding programs for acquisition of wetlands in Maine are listed in Table 28.

Table 28

Wetland Acquisition Funding Programs in Maine
Federal Programs
Focus on Fish & Wildlife Habitat
North American Waterfowl Management Plan Grants
National Coastal Wetlands Conservation Grants
Land and Water Conservation Fund (Federal-Side)
Migratory Bird Hunting Stamp Funds
US Fish and Wildlife Service Challenge Grants
Partnerships for Wildlife
Casco Bay Land Opportunity Fund
National Fish and Wildlife Foundation Grants
Gulf of Maine Council on the Marine Environment Mini-Grants
Focus on Forests
US Forest Service's Forest Legacy Program
Focus on Farmlands, Soil and Water Conservation
Farmland Protection Program
Wetland Reserve Program (WRP)
Environmental Quality Incentives Program (EQUIP)
Wildlife Habitat Incentives Program (WHIP)
State Programs
Land for Maine's Future
Maine Outdoor Heritage Fund
Land and Water Conservation Fund (Stateside)

The U.S. Fish and Wildlife Service's Gulf of Maine Program, the Maine Dept. of Inland Fisheries and Wildlife, The Nature Conservancy--Maine Chapter, Maine Coast Heritage Trust, the Land for Maine's Future Program, Ducks Unlimited, and local land trusts come together periodically as the Maine Wetland Protection Coalition to identify protection priorities and coordinate large grant application efforts that result in important wetland acquisitions in the five Maine Focus Areas of the North American Waterfowl Management Plan: Cobscook Bay, Lower Kennebec River/Merrymeeting Bay, East Coast (Penobscot Bay east), West Coast (West of Penobscot Bay), and Inland Wetlands. *Beginning with Habitat* Focus Areas for Conservation are recommended as targets for additional protection efforts by towns, local land trusts and other agencies and organizations. Other land acquisition initiatives focus on lands with important scenic, landscape, forest, recreation, water access, and other values, and often include important wetlands.

There is currently no single accounting of wetland acquisition in Maine that spans agencies, organizations and programs. Therefore, it is difficult to determine the overall progress on wetland protection by acquisition. The acquisition priorities set by the National Wetlands Priority Conservation Plan apply only to LWCF funds, which appear to represent a small proportion of the wetland acquisition dollars spent in Maine. In a report on habitat protection in Maine, by the US Fish and Wildlife Service, LWCF dollars totaled only \$3 million out of \$16.5 million that directly supported habitat protection in Maine.

There were no acquisition projects submitted as wetland protection projects for stateside LWCF funding between 1993 and 2002. Over 8,200 acres of land were acquired with LWCF dollars during the period, however, the presence of multiple values including shore frontage, habitat, open space, and recreation motivated these purchases (Table 29).

Table 29

MAINE LAND AND WATER CONSERVATION FUND ACQUISITION PROJECTS 1993-2002

PROJECTTITLE	YEAR	TOWN	COUNTY	ACRES	TOTFED	TOTAL	SPON
Lake George Acquisition	1993	CANAAN, SKOWHGN	SOM	224	\$200,000	\$850,000	S-BP&L
Robinson (Kennebec Highlands)	2000	MT VERNON	KEN	118	\$12,052	\$35,090	S-BP&L
Pillsbury (Kennebec Highlands)	2000	VIENNA	KEN	68	\$12,011	\$40,000	S-BP&L
Dolley (Kennebec Highlands)	2001	ROME	KEN	76	\$75,000	\$253,000	S-BP&L
Torsey Pond	2001	READFIELD	KEN	65	\$25,000	\$52,000	MUN
Hedgehog Hill (Mt Blue/Tumbledown)	2001	WELD	FRANK	2445	\$310,000	\$980,000	S-BP&L
West Branch Acquisition*	2001	VARIOUS	PIS	4865	\$2,000,000	\$4,141,645	S-BP&L
Dillon Acq (Mt Blue/Tumbledown)	2002	WELD	FRANK	375.8	\$56,600	\$131,600	S-BP&L
			TOTAL	8237	\$2,690,663	\$6,483,335	

*Special LWCF appropriation of \$2 million. Source: Maine Dept of Conservation, Bureau of Parks & Lands

H. Recommendations

The Maine State Wetland Conservation Plan proposes summarizing acquisition and restoration efforts in the state for the Land and Water Resources Council. A summary of wetland acres protected by acquisition, by type and location, seems essential for determining progress on protection and when priorities should be adjusted.

Because no wetland acquisition projects have been submitted for stateside LWCF funding since 1993, it seems advisable to remove the supplementary eligibility criteria recommended for wetland projects in the 1993 Maine SCORP, as an unnecessary restriction on the use of LWCF monies, and return to the recommendations of the 1988 SCORP addendum, which affirms the three primary criteria of the *National Wetlands Priority Conservation Plan* and identifies Maine LWCF wetland acquisition priorities based on these. The 1988 priorities index high value wetlands such as those identified in the *Beginning with Habitat* program.

MAINE WETLAND ACQUISITION PRIORITIES FOR STATESIDE LWCF FUNDS

RARE OR DECLINING WETLAND TYPES:

- palustrine emergent (fresh marshes)
- estuarine intertidal (coastal marshes and mudflats)
- some palustrine forested (wooded swamps) in York County and southern coastal areas

WETLANDS THREATENED WITH LOSS OR DEGRADATION

- coastal marshes in southern and mid-coast areas where population increases and second home construction is placing pressure on these areas
- large peatlands, if peat mining becomes prevalent in Maine;
- coastal intertidal areas in regions of high population growth;
- critical edge habitat in coastal and other wetlands; and

HIGH VALUE AND/OR FUNCTION WETLANDS, DETERMINED BY ON-SITE ANALYSIS

- high value and multi-value wetlands;
- habitats for rare and endangered plant and/or animal species;
- habitat types that are rare or threatened in the state and for which there are inadequate representatives under protected status;
- exemplary occurrences of common wetland types that are not receiving adequate protection;
- habitats of state significance for fishery and wildlife resources, and that may satisfy the goals and guidelines of international treaties such as the North American Migratory Waterfowl Plan;
- wetlands with important hydrological functions of state or regional significance; and
- culturally significant wetlands, such as those with recreational or educational potential and those that can accommodate high visitor use.

For further clarification, see The Maine Wetlands Conservation Priority Plan: An Addendum to the State Comprehensive Outdoor Recreation Plan (Widdoff, 1988)

Table 30
IMPORTANT, SCARCE, AND VULNERABLE WETLANDS IN MAINE
IDENTIFIED BY THE US FISH AND WILDLIFE SERVICE
UNDER AUTHORITY OF THE EMERGENCY WETLANDS RESOURCES ACT

No.	Site Name	County	City/Town	Acres	Wetland Type	Function/Value	Notes
1	*Aroostook River	Aroostook	Ashland, Marsardis	1,000	R2, R2EM	A, B, C, D, E	
2	*Crystal Bog	Aroostook	Crystal, Sherman	4,000	PEM, PSS, R2UB	A, E	
3	McCain Settlement Ponds	Aroostook	Washburn	200	PUB, PEM	A, D	
4	Penobscot River System (60 miles)	Aroostook, Penobscot	Medway to Old Town	4,800	R2, R2EM	A, B, D, E	
5	*Salmon Brook	Aroostook	Perham	2,000	PUB, PEM, PSS, PFO	A, E	
6	*St. John River	Aroostook	Allagash, Fort Kent, Frenchville, Madawaska, St. Francis, St. John, T11 R16, T12 R16, T12 R15, T13 R15, T13 R14, T14 R14, T14 R13, T15 R13, T16 R13, T16 R12	16,000	R2UB, R2US, R2EM, R2SS	A, B, D, E	
7	*White Pond Fen	Aroostook	T13 R15 WELS	650	PUB, PEM, PSS, PFO	A, E	
8	*Marquoit Bay, Middle Bay, Harpswell Sound	Cumberland	Brunswick, Freeport, Harpswell	2,300	M1, M2, E2EM	A, B, C, D, E	
9	*Rachel Carson NWR Inholdings	Cumberland, York	Biddeford, Cape Elizabeth, Kennebunk, Kennebunkport, Kittery,	2,100	E2EM, E2US, M1, M2	A, B, D, E	

No.	Site Name	County	City/Town	Acres	Wetland Type	Function/Value	Notes
			Ogunquit, Old				
			Orchard Beach,				
			Saco, Scarborough,				
			York				
10	Flagstaff Lake	Franklin,	Eustis,	600	L1, L2, PSS,	A,B,D	1
	(15 miles)	Somerset	Flagstaff		PFO, PEM		
11	*Bagaduce	Hancock	Brooksville,	2,000	E2EM, E2US,	A, B, D, E	
	River		Penobscot,		E1UB		
			Sedgewick				
12	*Grand Marsh	Hancock	Gouldsboro	200	E2EM, E2US,	A, B, D, E	
	Bay				E1UB		
13	Hog, Taunton,	Hancock	Franklin,	1,000	E1UB, E2US,	A, B, D	
	& Egypt Bays		Lamoine		E2EM		
14	*Long Mill	Hancock	Gouldsboro	150	E1UB, E2US,	A, B, D	
	Cove				E2EM		
15	Narraguagus	Hancock	T16 MD,	800	PUB, PSS,	A, B, D	
	Lake/Spring		T9 SD		PEM		
	River		TIO SD				
16	*Penobscot	Hancock,	Bucksport,	1,000	E2EM, E2US,	A, B, D, E	
	River	Waldo	Frankfort,		E1UB		
	Estuary		Orland,				
			Prospect,				
			Verona,				
			Winterport				
17	*Raccoon	Hancock	Lamoine	250	E2EM, E2US,	A, B, D, E	
	Cove				E1UB		
18	Skilling	Hancock	Hancock,	1,200	E2EM, E2US,	A, B, D	
	River		Lamoine		E1UB		
19	*Belgrade Bog	Kennebec	Belgrade	1,300	PEM, PSS,	A, B, C, D, E	
					PFO		
20	Fowler Bog	Kennebec,	Unity	2,000	PFO, PSS,	A, D, E	
		Waldo			PEM		
21	*Kennebec	Kennebec,	Richmond,	1,000	R1, R1EM,	A, B, D, E	2
	River	Lincoln,	South Gardiner		R1AB		
	(Richmond to	Sagadahoc					
	Gardiner)						
22	Kennebec	Kennebec,	Solon to	3,600	R1, R2,	A, B, D, E	
	River System	Somerset	Waterville		R2EM		
	(45 miles)						
23	Sebasticook	Kennebec,	Clinton to	2,400	R2, R2EM,	A, B, D	
	River System	Somerset,	Harmony		PSS, PEM		
		Waldo					
24	*Appleton Bog	Knox	Appleton	400	PEM, PSS,	A,E	
					PFO		
25	St. George	Knox	Cushing,	400	E1US, E1UB,	A, B, D, E	

No.	Site Name	County	City/Town	Acres	Wetland Type	Function/Value	Notes
	River		South		E2EM, E2BB		
			Thomaston,				
			St. George,				
			Warren				
26	Muscongus Bay	Lincoln	Bremen,	1,500	M1, E2EM,	A, B, C, D, E	
	Complex		Bristol,		M2, E1UB		
			South Bristol,				
			Waldoboro				
27	*Sheepscot	Lincoln	Alna,	2,000	R1, R1EM,	A, B, D, E	
	River Complex		Boothbay,		R1AB, E1,		
			Newcastle		E2EM		
28	*Kazar Outlet	Oxford	Lovell	200	R2UB, PEM,	A, D, E	
	Fen				PSS, PFO		
29	*Swimming Bog	Oxford	Fryeburg	200	R2UB, PEM,	A, B, E	
					PSS, PFO		
30	*Lake Umbagog	Oxford	Magalloway	680	L1, L2,	A, B, D, E	3
	(17 miles)		Plt., Upton		L2EM		
31	*Wilson Mills	Oxford	Magalloway	650	R2UB, PEM,	A, B	
	Bog				PSS		
32	*Dwinal Flowage	Penobscot	Lee, Winn	2,000	R2UB, PEM,	A, B, D, E	
					PSS, PFO		
33	*Mainstream	Penobscot,	Cambridge,	300	PEM, PSS	A, C, E	
	Pond	Somerset	Harmony,				
			Ripley				
34	Marble Fen	Penobscot	T6 R7 WELS,	750	PEM, PSS	A, E	
			T6 R8 WELS,				
			T5 R8 WELS				
35	*Mattagodus	Penobscot	Webster Plt.	1,200	R2UB, PEM,	A, B, E	4
	Stream				PSS, PFO,		
36	*Mud Pond	Penobscot	Drew Plt.	2,500	L2, L1, PEM,	A, B, D	
					PFO, PSS		
37	*Plymouth Pond	Penobscot	Plymouth	1,000	PEM, PSS	A, C, E	
38	*Skinner Bog	Penobscot	Dixmont	1,000	PEM, PSS	A, E	
					PFO		
39	*Thousand Acre	Penobscot	Passadumkeag	1,000	PEM, PSS	A, E	
	Heath						
40	*Cassidy	Piscataquis	T4 R15 WELS	1,000	PEM, PSS,	A, B, D	
	Deadwater				PFO, L1, L2		
41	Caucacomgomoc	Piscataquis	Chesuncook,	1,200	L1, L2, PEM,	A, B, D	
	Stream, Brandy		T5 R14 WELS,		PSS, PFO,		
	and Black Ponds		T6 R14 WELS,		PUB, R1		
			T6 R13 WELS				
42	*Mooseleuk	Piscataquis	T10 R9 WELS	3,000	L1, L2, PEM	A, B, D	
	Lake						
43	*Pine Stream	Piscataquis	T4 R13 WELS	2,500	L2, PEM	A, B, D	

No.	Site Name	County	City/Town	Acres	Wetland Type	Function/Value	Notes
	Flowage				L1, PSS		
44	*Back River	Sagadahoc	Arrowsic,	3,000	E2EM, E2US,	A, B, D, E	2
			Georgetown		E2AB, R1EM,		
					R1		
45	Hanson Bay	Sagadahoc	Arrowsic,	400	E2EM, E1UB,	A, B, D	2
			Woolwich		E2US		
46	Merrymeeting	Sagadahoc	Bath,	10,000	E2EM, E2US,	A, B, D, E	
	Bay		Bowdoinham,		R1EM, R1US		
			Brunswick,				
			Dresden,				
			Topsham,				
			Woolwich				
47	Sprague and,	Sagadahoc	Phippsburg	600	E2EM, E1UB,	A, B, D	1, 2
	Morse Rivers				E2US		
48	Winnegance	Sagadahoc	Phippsburg,	1,000	PEM, PSS,	A, B, D	2
	Creek		West Bath		L1UB		
49	*Big Bog	Somerset	T5 R17 WELS,	2,000	PEM, PSS,	A, B, D	
			T5 R18 WELS		PFO		
50	Black Brook	Somerset	Pierce Pond	750	PUB, PEM,	A, D	
	Pond				PSS		
51	*Dead River	Somerset	T3 R4	2,500	R3, PSS,	A, B, D	
			BKP WKR		PFO, PEM		
52	*Bog Brook	Washington	Beddington	1,200	PUB, PEM,	A, B, D, E	
					PSS, PFO,		
					R3		
53	Carrying Place	Washington	Harrington	250	E1UB, E2EM,	A, B, D	
	Cove				E2US		
54	*Crowley	Washington	Addison	1,000	E2EM, E2US	A, B, D	
	Island						
55	*Dennys Bay	Washington	Dennysville,	2,000	E2EM, E2US,	A, B, D, E	5
			Edmunds,		E1UB		
			Pembroke				
56	*Downing Bog	Washington	Cherryfield	160	PEM, PSS,	A, E	
					PFO		
57	Jonesport	Washington	Jonesport	500	PEM, PSS	A, E	
	Heath -						
	North Unit						
58	Little	Washington	Machias	1,000	E1IUB, E2US,	A, B, D	
	Kennebec				E2EM		
	Bay						
59	Lubec Flats	Washington	Lubec	250	M1UB, M2UB,	A, B, D, E	5
					M2RS		
60	*Meddybemps	Washington	Alexander,	1,000	PEM, PSS	A, E	
	Heath		Cooper,				
			Meddybemps				

No.	Site Name	County	City/Town	Acres	Wetland Type	Function/Value	Notes
61	Mill River/ Meadow Brook	Washington	Harrington, Milbridge	2,000	R1EM, R1US	A, B, D	
62	Pleasant River	Washington	Columbia Falls	1,500	R1EM, R1UB, R1US	A, B, D	
63	*Straight Bay	Washington	Lubec, Trescott	2,000	E2EM, E2US, E1UB	A, B, D, E	5
64	*Tomah Flowage	Washington	Codyville	2,000	PFO, PSS, PEM, L1, L2	A, B, D	
65	Whiting Bay	Washington	Edmunds, Trescott, Whiting	2,000	E1UB, E2EM, E2US	A, B, D, E	5, 6
66	Wohoa Bay Estuary	Washington	Addison	600	M2US, E2EM, M1UB, E1UB	A, B, D	
67	*Beaver Dam Pond/Heath	York	Berwick	120	PEM, PSS	A, C, D	
68	*Bell Marsh	York	York	25	PEM, PSS	A, C, D	
69	*Saco Heath	York	Saco	1,500	PEM, PSS	A, E	
70	*Sanford Ponds	York	Sanford	1,000	PEM, PUB, PSS, PFO	A, B, D, E	
71	*York River	York	York	400	E1UB, E2US, E2EM, E2SS	A, B, D, E	
			Total Acres	114,785			

Source: *Regional Wetlands Concept Plan, Emergency Wetland Resources Act, Northeast Region*, October 1990, US Fish & Wildlife Service, Region 5, One Gateway Center, Suite 700, Newton Corner, MA 02158

Notes

The numbers in the first column refer to the map of Maine.

* Wetlands Assessment Threshold Criteria sheets have been completed for these sites.

1 Part of this site is already owned by the State.

2 This site is part of the Kennebec River wetland complex from Augusta south to Merrymeeting Bay

3 This is the eastern end of Lake Umbagog, most of which is in New Hampshire. See N H list for additional information.

4 The Lands for Maine's Future Board plans to purchase 1,425 acres in the summer of 1990.

5 This site is part of the Cobscook Bay complex.

6 The Land for Maine's Future Board recently purchased 1,520 acres of coastal property south of Cobscook Bay State Park in Edmunds Twp. They also acquired a 250-acre purchase and easement precluding development in Trescott Twp., directly across the Bay from the Edmunds Twp. property.

Wetland types are identified in these tables using the Cowardin *et al.* classification system, as follows:

SYSTEMS AND SUBSYSTEMS

M Marine	R Riverine	E Estuarine	L Lacustrine	P Palustrine - Upland
1 Subtidal	1 Tidal	1 Subtidal	1 Limnetic	No Subsystem
2 Intertidal	2 Lower Perennial	2 Intertidal	2 Littoral	
	3 Upper Perennial			
	4 Intermittent			
	5 Unknown Perennial			

CLASSES

AB Aquatic Bed	RS Rocky Shore
EM Emergent	SB Streambed
FO Forested	SS Scrub-shrub
ML Moss/Lichen	UB Unconsolidated Bottom
RB Rocky Bottom	US Unconsolidated Shore
RF Reef	

FUNCTIONS AND VALUES derived from the Wetlands Assessment Threshold Criteria are coded in these tables as follows:

A = Wildlife	C = Water Supply/Quality, Flood and Erosion Protection	E = Other Areas or Concerns
B = Fisheries	D = Outdoor Recreation	

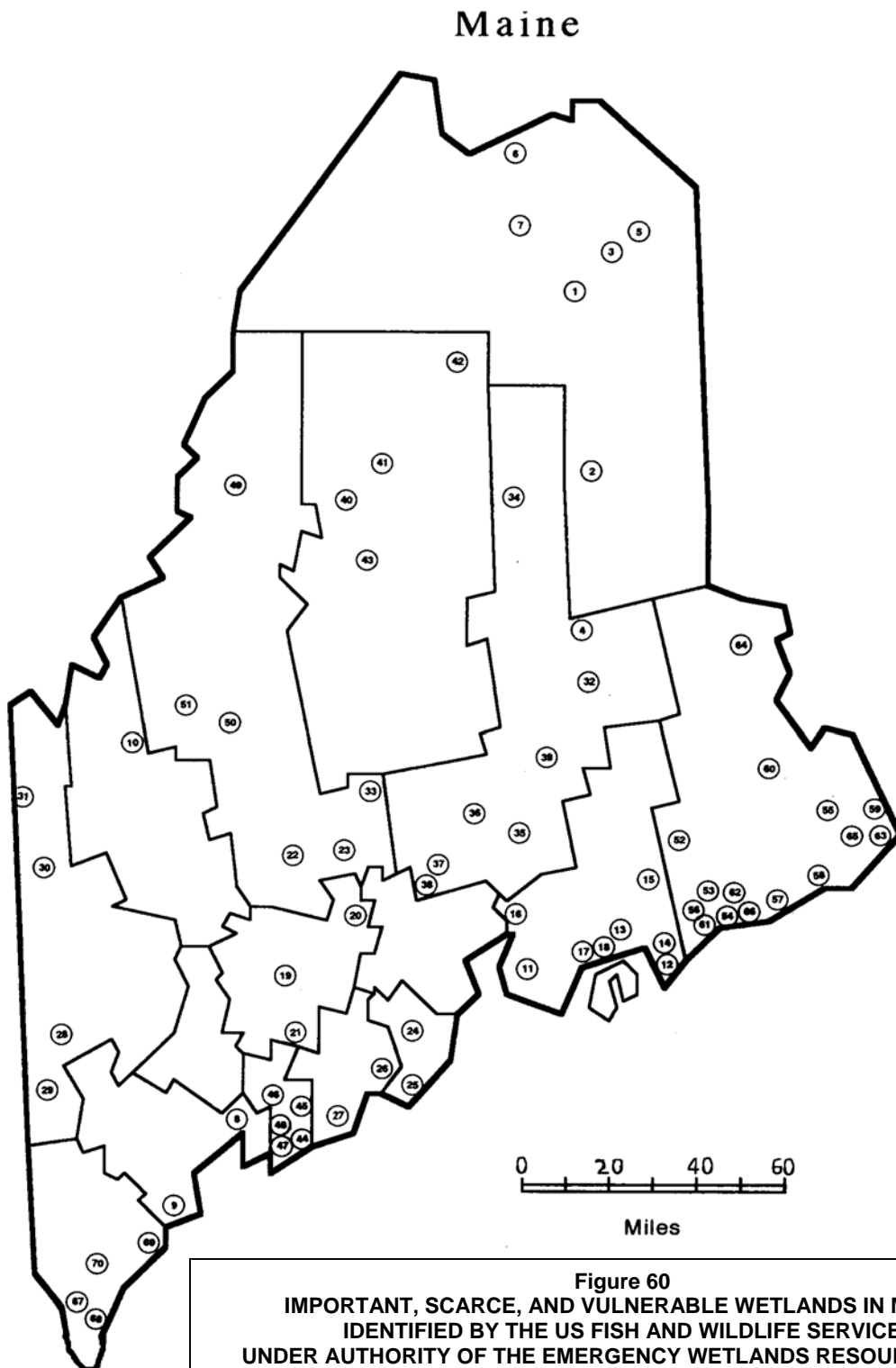


Figure 60
IMPORTANT, SCARCE, AND VULNERABLE WETLANDS IN MAINE
IDENTIFIED BY THE US FISH AND WILDLIFE SERVICE
UNDER AUTHORITY OF THE EMERGENCY WETLANDS RESOURCES ACT
(Refer to Numbers in Table 30)

Source: Regional Wetlands Concept Plan, Emergency Wetland Resources Act, Northeast Region, October 1990, US Fish & Wildlife Service, Region 5, Newton Corner, MA

Table 31
MATRIX INDICATING ADDITIONAL RECOGNITION OF PRIORITY WETLANDS
IN MAINE BY FEDERAL OR STATE AGENCIES

Site Name	SCORP	EPA	FWS	NAWMP	OTHER
Appleton Bog					x1
Aroostook River		x		x2	x1,3
Back River				x4	
Bagaduce River				x5	
Beaver Dam Pond/Heath					
Belgrade Bog					
Bell Marsh					
Big Bog				x2	
Black Brook Pond				x2	
Bog Brook				x2,6	
Carrying Place Cove		x		x5	
Cassidy Deadwater				x2	
Caucacomgomoc Stream, Brandy and Black Ponds				x2	
Crowley Island				x5	
Crystal Bog					x1
Dead River				x2	
Dennys Bay		x		x6,7	
Downing Bog				x2	
Dwinal Flowage					
Flagstaff Lake (15 miles)				x2	
Fowler Bog				x2	
Grand Marsh Bay				x5	
Hanson Bay				x4	
Hog, Taunton, and Egypt Bays				x5,6	
Jonesport Heath - North Unit		x			
Kennebec River (Richmond to Gardiner)				x4	x1
Kennebec River System (45 miles)				x2	x3
Kezar Outlet Fen					
Lake Umbagog (17 miles)		x		x2	
Little Kennebec Bay				x5	
Long Mill Cove		x		x5	
Lubec Flats		x		x6,7	
Mainstream Pond					
Marble Fen		x			
Marquoit and Middle Bays, Harpswell Sound				x6,8	
Mattagodus Stream					
McCain Settlement Ponds				x2	
Meddybemps Heath		x	x		x1
Merrymeeting Bay		x		x4	x1,3
Mill River/Meadow Brook				x5	
Mooseluk Lake				x2	
Mud Pond				x2	
Muscongus Bay Complex				x6,8	
Narraguagus Lake/Spring River				x2	

Site Name	SCORP	EPA	FWS	NAWMP	OTHER
Penobscot River Estuary		x		x5,6	
Penobscot River System (60 miles)				x2	x1,3
Pine Stream Flowage				x2	
Pleasant River		x		x5	x1,3
Plymouth Pond					
Rachel Carson NWR Inholdings		x		x6,8	
Raccoon Cove				x5	
Saco Heath		x			
Salmon Brook					
Sanford Ponds					
Sebastiancook River System				x2	
Sheepscot River Complex		x		x8	x3
Skillings River				x5	
Skinner Bog				x2	
Sprague and Morse Rivers				x4	
St. George River		x		x8	x1,3
St. John River					x1,3
Straight Bay				x6,7	
Swimming Bog					
Thousand Acre Heath				x	x9
Tomah Flowage				x2	
White Pond Fen					
Whiting Bay				x6,7	
Wilson Mills Bog					
Winnegance Creek				x4	
Wohoa Bay Estuary				x5	
York River		x			

Source: *Regional Wetlands Concept Plan, Emergency Wetlands Resources Act, Northeast Region*, October 1990 by U.S. Fish and Wildlife Service, Region 5, One Gateway Center, Suite 700, Newton Corner, MA.

Notes

The following codes apply to the headings in each table:

SCORP: Site identified in the State Comprehensive Outdoor Recreation Plan or by the SCORP agency in another document.

EPA: Site is identified by the Environmental Protection Agency as a priority wetland.

FWS: Site has been identified by the U.S. Fish and Wildlife Service as a Unique Ecosystem.

NAWMP: Site is included in a focus area of either the Lower Great Lakes-St. Lawrence Basin Joint Venture or the Atlantic Coast Joint Venture of the North American Waterfowl Management Plan, unless otherwise noted.

OTHER: Other designations. These are identified by the notes below.

1 Identified by the State of Maine as an Outstanding or Significant River Segment.

2 This site is part of the Inland Wetlands focus area identified in the North American Waterfowl Management Plan Atlantic Coast Joint Venture (ACJV) report.

3 This river is on the Nationwide Rivers Inventory of designated or potential wild and scenic rivers.

4 This site is part of the Merrymeeting Bay and Lower Kennebec River focus area identified in the ACJV report.

5 This site is part of the East Coast focus area identified in the ACJV report.

6 This site is recognized in both the U.S. Fish and Wildlife Service Category Plan for Preservation of Black Duck Wintering Habitat and the ACJV report.

7 This site is part of the Cobscook Bay focus area identified in the ACJV report.

8 This site is part of the West Coast focus area identified in the ACJV report.

9 Identified as Passadumkeag Marshes and evaluated as a possible National Park Service National Natural Landmark.

Table32
Beginning with Habitat Focus Areas for Conservation
 2/10/03

County	Focus Area
Androscoggin	Androscoggin Lake Little Sabattus Pond
Cumberland	Crescent Beach Killick Pond Merrymeeting Bay Perly Pond Pleasant River Scarborough Marsh Tucker Brook
Franklin	Kennebec Highlands
Kennebec	Androscoggin Lake Belgrade Esker Cobbosseecontee - Annabessacook South Kennebec Highlands Kennebec River at Sidney-Vassalboro Martin Stream Merrymeeting Bay Messalonskee Marsh Sidney Bog Spectacle and Tolman Ponds Unity Wetlands Wayne - Fayette Sand Barrens Weston Meadow
Knox	Appleton Bog - Pettingill Stream - Witcher Swamp Camden Hills Georges River Mansfield Pond Ragged Mountain - Bald Mountain Rockland Bog Upper Weskeag River
Lincoln	Alna Area - Sheepscot River Merrymeeting Bay
Oxford	Jugtown Plains Kezar Pond Fen Porter Hills Upper Saco River
Penobscot	Caribou Bog Carlton Pond North East Branch of the Sebasticook Indian Ponds
Sagadahoc	Back River / Hockomock Bay Little River - Georgetown Merrymeeting Bay Morse Mountain Pasture Ridge
Somerset	Carlton Pond North Douglas Pond and Madawaska Bog Great Moose Lake Indian Ponds Martin Stream Upper Sebasticook River Wetlands

County	Focus Area
Waldo	Appleton Bog - Pettingill Stream - Witcher Swamp Big Meadow Bog Camden Hills Carlton Pond North Pitcher Pond - Knights Pond Unity Wetlands
York	Bauneg Beg Mountain Beaver Dam Heath Biddeford / Kennebunkport Vernal Pool Complex Braveboat Harbor / Gerrish Island Central Parsonsfield Folsom Pond Kennebunk Plains Killick Pond Massabesic Forest South Massebesic Forest North Mount Agamenticus Area Saco Heath Sanford Ponds Scarborough Marsh Shaker Pond South Acton Swamps Walnut Hill Waterboro Barrens Wells Heath Wells Marsh

Source: Maine Department of Conservation, Natural Areas Program

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